



US 20170102521A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2017/0102521 A1**
SON (43) **Pub. Date:** **Apr. 13, 2017**

(54) **OPTICAL IMAGING SYSTEM**

G02B 1/04 (2006.01)

(71) Applicant: **SAMSUNG
ELECTRO-MECHANICS CO., LTD.**,
Suwon-si (KR)

G02B 27/00 (2006.01)

G02B 5/00 (2006.01)

G02B 5/20 (2006.01)

(72) Inventor: **Ju Hwa SON**, Suwon-si (KR)

(52) **U.S. Cl.**

CPC **G02B 13/0045** (2013.01); **G02B 5/005**

(2013.01); **G02B 5/208** (2013.01); **G02B 1/04**

(2013.01); **G02B 27/0025** (2013.01); **G02B**

9/60 (2013.01)

(73) Assignee: **SAMSUNG
ELECTRO-MECHANICS CO., LTD.**,
Suwon-si (KR)

(21) Appl. No.: **15/085,125**

(57)

ABSTRACT

(22) Filed: **Mar. 30, 2016**

(30) Foreign Application Priority Data

Oct. 13, 2015 (KR) 10-2015-0142841

Publication Classification

(51) **Int. Cl.**

G02B 13/00 (2006.01)

G02B 9/60 (2006.01)

An optical imaging system includes a first lens, a second lens, a third lens, a fourth lens, and a fifth lens having an inflection point formed on an image-side surface thereof. The first to fifth lenses are sequentially disposed from an object side to an imaging plane. The optical imaging system satisfies $TTL/(ImgH^*2) < 0.65$, where TTL is a distance from an object-side surface of the first lens to the imaging plane, and ImgH*2 is a diagonal length of the imaging plane.

